FQPA Science Review Board Biographical Sketches

1. **Dr. Michelle Boone** is an Associate Professor of Zoology at Miami University of Ohio. She received her Ph.D. in Biological Sciences at the University of Missouri-Columbia in 2000 and was a postdoctoral researcher at the U.S. Geological Survey from 2001-2004. Dr. Boone is currently on the Editorial Board for Environmental Toxicology and Chemistry and on the Board of Governors for the American Society of Ichthyologists and Herpetologists. She has published 48 peer-reviewed articles and book chapters and has received funding from National Science Foundation, National Institutes of Health, and the National Fish and Wildlife Foundation. Her lab's research interests focus on the ecological ramifications of human actions through studies of amphibian populations and communities. In particular, her lab has a strong focus on the impact of environmentally relevant concentrations of pesticides on amphibians in the presence of multiple natural and anthropogenic factors.

2. **Dr. William Effland** is a Soil Scientist working in the Resource Assessment Division of the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) where he conducts resource analysis, modeling and statistical analysis, and wetland and watershed studies of the effects of conservation practices and programs on the environment in collaboration with other federal, state and local government agencies, and non-governmental organizations for USDA's Conservation Effects Assessment Project (CEAP). Starting in 2009, Dr. Effland is the CEAP Wetlands Leader of a multi-agency project conducting collaborative regional assessments to quantify ecosystem services and interpret effects associated with wetland conservation practices and Farm Bill conservation programs. Bill co-leads a modeling and natural resource analysis effort integrating the National Resources Inventory (NRI) with CEAP-Wetlands landscape models of wetland ecosystem services. His research interests involve modeling ecosystems services in natural resources, exploratory spatial data analysis and information visualization, soil diversity, and applications of pedology to landscape ecology and other sciences. He earned a Ph.D. in Soil Science from the Department of Agronomy at Iowa State University and has worked extensively in environmental pedology for 29 years. Dr. Effland next worked for an environmental engineering firm as a project leader for laboratory and field studies followed by work in the Environmental Fate and Effects Division of the EPA's Office of Pesticide Programs actively promoting the applications of pedology and geographical information systems (GIS) for environmental risk assessment and risk characterization. Dr. Effland taught introductory and advanced courses in soil geography, field research techniques, environmental science and policy, and environmental contaminants fate and transport at the University of Maryland - Baltimore County and also taught introductory soil science at the USDA Graduate School. He has served on grant review panels for the National Institutes of Health and as a charter member of the Department of Army's Ft. Detrick Restoration Advisory Board. During 2003-2004. Bill taught GIS and soil landscape analysis techniques to staff of Ghana's Soil Research Institute and conducted field research to support development of agricultural production in Ghana's Afram Basin. In 2008, he was as a technical advisor to the Asian Soil Information System International Working Group in Japan, and in 2009, was an invited speaker to the 9th International Conference of the East and Southeast Asia Federation of Soil Science Societies in Seoul, Korea. Dr. Effland has served as a peer-reviewer for the EPA Federal, Insecticide, Fungicide and Rodenticide Act Scientific Advisory Panel.

3. **Dr. Tim Ellsworth** is a soil physics faculty member in the Department of Natural Resources and Environmental Sciences at the University of Illinois where he serves as the faculty director and advisor of the online MS program. He research focus is on characterizing flow and transport in watersheds and developing soil-based nutrient management strategies. He has been an invited speaker at local, regional, national, and international conferences and symposia, and has published over 40 refereed articles as well as numerous reports and conference proceedings. He has provided program and proposal reviews for various agencies including USDA, NSF, Illinois Groundwater Consortium, and Illinois Council of Food and Agricultural Research. He has served as a peer-reviewer on the U.S. EPA's Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel.

4. **Dr. Bernard Engel** is Professor and Head of the Department of Agricultural and Biological Engineering at Purdue University. He has a B.S. (1984) and M.S. (1985) in Agricultural Engineering from the University of Illinois. He earned a Ph.D. (1988) in Agricultural Engineering from Purdue University. Since 1988, he has been a professor in the Purdue University Agricultural Engineering. He is the founding Director of the Purdue University Center for the Environment. Dr. Engel has published extensively in areas related to hydrologic/water quality modeling, environmental modeling, GIS, and decision support systems. His publication record includes more than 130 journal articles on these topics. His hydrologic/water quality modeling efforts range in scales from small plots to fields, watersheds and river basins. His modeling and decision support tools are widely used within state and federal agencies as well as internationally. As part of his research efforts, he has mentored 39 graduate students who have completed an M.S. or Ph.D. His research efforts have been supported by various state and federal agencies including USDA, USEPA, NSF, USGS, DOE and NASA. Dr. Engel's excellence in research was recognized by the American Society of Agricultural and Biological Engineers (ASABE) with their Outstanding Young Researcher Award and by the Purdue University College of Agriculture Outstanding Researcher Award. In addition, he has been designated a University Faculty Fellow by Purdue University. Dr. Engel teaches or has taught numerous courses on soil and water conservation, hydrologic/water quality modeling, GIS applications to water resources and the environment, land surveying, and engineering design. His teaching in these areas has been recognized with an outstanding departmental teaching award. He has served as a peer-reviewer on the U.S. Environmental Protection Agency's Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel.

5. **Mr. James Fairchild** has worked as an ecologist for the United States Geological Survey since 1981. Currently, he is a Research Ecologist and Section Leader of the Community Ecology Section (Ecology Branch) at the Columbia Environmental Research Center. The Community Ecology Section investigates and monitors the effects of physical, chemical and biotic stressors on fish, invertebrate, plant, and soil communities, and develops and tests new methods for environmental assessment and monitoring. Mr. Fairchild's research has been conducted under laboratory, outdoor mesocosm, and field conditions. Mr. Fairchild has published over 70 peer review journal publications. He served at Associate Editor for the journal Environmental Toxicology for 8 years (2000-2008). He has served as a peer-reviewer for 15 other professional journals. He has served on a dozen U.S. EPA scientific review panels including the Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel and the Science Advisory Board (SAB).

6. **Dr. Betty Fetscher** directs the stream algae research program at the Southern California Coastal Water Research Project (SCCWRP), a public agency that conducts coastal environmental research and develops recommendations for natural resource management strategies. Primary goals of the algae program are to design integrative, ecological tools for the development of biologically based regulatory objectives for stream condition, as well as to support the setting of nutrient numeric targets for the state. Dr. Fetscher chaired the technical committee that crafted the long-term plan for the implementation of algal indicators by California's Surface Water Ambient Monitoring Program (SWAMP), authored the program's Standard Operating Procedures for field sampling of stream algae, and served as an algae expert on the technical review panel of the EPA National Wetlands Condition Assessment Field Operations Manual. She played the lead role in development of an algal Index of Biotic Integrity for use in southern California wadeable streams, and is providing recommendations for the implementation of algal indicators into the state's stream Nutrient Numeric Endpoints (NNE) framework. In addition, she recently embarked on research on the distribution, causes, and effects of cyanobacterial toxins in California wadeable streams and depressional wetlands.

7. **Mr. Robert Gilliom** directs the Pesticide National Synthesis Project of the National Water Quality Assessment Program, U.S. Geological Survey, a position he has held since 1990. In this role, he has had responsibility for the design, execution, and data analysis of studies of pesticides in streams and ground water nationwide. Mr. Gilliom has been a hydrologist with the U.S. Geological Survey since 1978. Prior to the Pesticide Project, he served as project chief for USGS San Joaquin Valley Studies from 1984-1989 and was with the Systems Analysis Group, a USGS data-analysis research team, during 1981-1984. He received his MS in hydrology from the University of Washington, College of Engineering in 1978, and a BS in Environmental Systems Analysis from Huxley College of Environmental Studies in 1976. Research and publications have focused on water-quality assessment, ranging from statistical methods for data analysis, to regional and national assessments of nutrients, trace elements, and pesticides. Specific research interests and publications have included statistical analysis of data with non detections, national-scale analysis of pesticide occurrence in hydrologic systems, and the significance of pesticide mixtures to stream ecosystems. Mr. Gilliom has served on numerous advisory committees and groups, including the ILSI committee on "Assessment of methods to estimate pesticide concentrations in drinking water sources," several U.S. EPA Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panels, as well as numerous USGS and interagency workgroups involved with the design of water-quality monitoring.

8. **Dr. Thomas La Point** is Professor and former Director of the Institute of Applied Science at the University of North Texas. Prior to his tenure at the University of North Texas, he was also Professor in the Department of Environmental Toxicology at Texas Tech (1997–98), and before that as Associate Professor with the Institute of Wildlife and Environmental Toxicology at Clemson University (1991–97). Prior to 1991 (1985–1991), he was the Ecotoxicology Branch Leader for the U.S. Fish & Wildlife National Contaminants Research Center in Columbia, MO. Dr. La Point's primary research and teaching interests include contaminant effects on freshwater aquatic communities, specifically in how metals and organic contaminants affect benthic population dynamics and freshwater fisheries. He has published on ecosystem measures, contaminant bioaccumulation, and sub-lethal effects on aquatic populations. Dr. La Point has served as a peer-reviewer on several U.S. EPA Federal Insecticide, Fungicide, and Rodenticide Act

Scientific Advisory Panels concerned with pesticides and ecological risk and has worked as a consultant for the EPA on Superfund issues at large sites. He has recently (2003–05) served on a National Academy of Sciences, National Research Council Committee on Superfund Site Assessment and Remediation in the Coeur d'Alene River Basin. Dr. La Point is currently serving as Chair of a Water Environment Research Foundation subcommittee on whole-effluent testing as an indicator of aquatic health. He has served on several NSF, EPA and U.S. Geological Survey panels to review proposals submitted for funding. Dr. La Point is also serving on the editorial boards for the journal, *Chemosphere and Environmental Toxicology and Pharmacology*, and has served as Editor of the Society of Environmental Toxicology and Chemistry's (SETAC) Special Publication Series.

9. **Dr. Kenneth M. Portier** is Program Director for Statistics at the American Cancer Society (ACS) home office in Atlanta, GA, and is Courtesy Associate Professor of Statistics in the Institute of Food and Agricultural Sciences at the University of Florida (UF), Gainesville, FL. A native of southern Louisiana, Dr. Portier received a B.S. in mathematics (1973) from Nicholls State University in Thibodaux, Louisiana, and a M.S. in Statistics (1975) and Ph.D. in Biostatistics (1979) from the University of North Carolina, Chapel Hill. He has been with ACS since early 2006, where he provides general statistical support to cancer researchers in the area of design and analysis of cross-sectional and longitudinal sample surveys, program evaluation and cancer modeling. Prior to ACS, he spent 27 years as a statistical consultant to researchers in agriculture, natural resources and the environment and as a teacher of applied statistics at the graduate level at UF. Dr. Portier has coauthored over 150 publications in many of the premier journals in agriculture, natural resources and environmental sciences. He has received national recognition for his teaching and was a participant in two U.S. Department of Agriculture (USDA) teaching grants, one on new methods for teaching natural resources sampling and the other to develop a study abroad course in natural resources assessment with the Czech Republic. His collaborations with other researchers at UF have resulted in 36 research grants from numerous agencies including the National Science Foundation, USDA, the National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency, and the Department of the Interior. He continues to collaborate with UF's Center for Environmental and Human Toxicology on statistical questions that arise in environmental sampling and risk assessments. He has been a member and Chair of the EPA's Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel and a member of the National Institute of Health's National Institute of Environmental Health Sciences' (NIH-NIEHS) National Toxicology Program science advisory panels reviewing human and ecological risks. His research interests are wide, including the application of new statistical methodologies to cancer research and environmental problems. His statistical interests are in multivariate methods. He continues his interest in the teaching of statistics.

10. **Dr. Catherine Propper** is a Professor of Environmental Endocrinology in the Department of Biological Sciences at Northern Arizona University, Flagstaff, AZ. Dr. Propper received her Bachelor's degree in Zoology from the University of California, Berkeley in 1982. She received her Ph.D. in Zoology at Oregon State University in 1989. She was supported by a National Institute of Mental Health NRSA Postdoctoral Fellowship at University of Colorado, Boulder from 1989-1990. Dr. Propper was hired in the Department of Biological Sciences at Northern Arizona University as an Assistant Professor in 1991 and has remained

at NAU where she is currently Professor and Associate Chair for Graduate Programs. Dr. Propper is an associate editor for *Frontiers in Toxicogenomics* and has served as secretary for the Division of Comparative Endocrinology in the Society of Integrative and Comparative Biology. She has served on proposal review panels for the NSF and the USEPA, and as an outside reviewer for the China-Canada Joint Health Research Initiative. Dr. Propper was a reviewer for the U.S. EPA's Endocrine Disruptor Screening Program's Amphibian Metamorphosis Assay Protocol. Dr. Propper's teaching responsibilities include courses in Endocrinology, Animal Physiology and Vertebrate Evolution. She has published 48 peer-reviewed journal articles, technical reports and book chapters. Her research interests include how environmental information, including exposure to environmental contaminants, is translated into endocrine responses that influence development, reproduction and behavior.

11. **Dr. John Rodgers** is a Professor of Environmental Toxicology and Ecotoxicology at Clemson University in the School of Agriculture, Forest and Environmental Sciences. He received his Ph.D. degree in 1977 from Virginia Polytechnic Institute and State University. In his career of over 35 years, Dr. Rodgers has published more than 100 peer reviewed papers and several books on topics related to aquatic toxicology and water quality. Dr. Rodgers manages an active research program that involves characterization and mitigation of ecological risks from potential pollutants in aquatic ecosystems. He has conducted research on nuisance algal problems and wetlands throughout the world. He served as President, on the Board of Directors as well as numerous other positions for the Society of Environmental Toxicology and Chemistry. He also helped to found the Canadian Network of Toxicology Centers for universities in Canada. He serves as scientific advisor to numerous organizations including the U.S. EPA, Aquatic Ecosystem Restoration Foundation, and the U.S. Army Corps of Engineers. He was instrumental in development of the original U.S. EPA risk assessment guidance documents and remains engaged in that activity.

12. **Dr. Michael Twiss** is a Professor of Biology and Director of the Great Rivers Center at Clarkson University, in Potsdam, NY. He arrived at Clarkson in 2002, following tenure as an assistant professor at Ryerson University in Toronto (1998-2002), a post-doctoral fellowship at Woods Hole Oceanographic Institution, and a PhD in *sciences de l'eau* (limnology) at the Université du Québec. His research has been awarded the Governor General of Canada Gold Medal for Academic Excellence, the Premier's Research Excellence Award by the Province of Ontario and the Chandler-Misener Award by the International Association for Great Lakes Research. Current research focuses on Great Lakes-St. Lawrence River limnology and has been funded by such organizations as New York Sea Grant, New York Power Authority, National Science Foundation, the USEPA Great Lakes National Program Office, and the Syracuse Center of Excellence in Environmental and Energy Systems**.** Dr. Twiss teaches limnology, microbiology, botany, and a multidisciplinary course entitled 'Great Lakes Water Protection'. He has published over 50 peer-reviewed articles focusing on freshwater phytoplankton ecology, biogeochemistry, and interactions of plankton with trace metals and organic compounds. He has served on grant review panels for NSERC (Canada) and NSF (USA). Dr. Twiss was Associate Editor of the *Journal of Phycology* (2005-2012), is a current member of the editorial board of *Frontiers in Aquatic Microbiology*, and is a member of the Remedial Advisory Committee for the St. Lawrence River at Massena Area of Concern.

13. **Dr. Linda Young** is a Professor of Statistics at the University of Florida where she teaches, consults, and conducts research on statistical methods for studies in public health, agricultural, environmental, and

ecological settings. Dr. Young has a Ph.D. from Oklahoma State University. She has been a faculty member at Oklahoma State University, the University of Nebraska, and the University of Florida. Dr. Young has more than 100 publications in 59 different journals, constituting a mixture of statistics and subject-matter journals, and three books. A major component of her work is collaborative with researchers in the agricultural, ecological, environmental, and health sciences. Her recent research has focused on linking disparate data sets and the subsequent analysis of these data using spatial statistical methods. Dr. Young has been the editor of the *Journal of Agricultural, Biological and Environmental Statistics*. She is currently associate editor for *Biometrics, Journal of Environmental and Ecological Statistics*, and *Sequential Analysis*. She also has a keen interest in statistics education at all levels, having worked with students and teachers from Kindergarten through High School as well as undergraduate, graduate, and post-graduate training. Dr. Young has served in a broad range of offices within the professional statistical societies, including President of the Eastern North American Region of the International Biometric Society, Vice-President of the American Statistical Association, Chair of the Committee of Presidents of Statistical Societies, Treasurer of the International Biometric Society, and an Executive Committee member of the National Institute of Statistical Science's Board of Trustees. She is a fellow of the American Association for the Advancement of Science, a fellow of the American Statistical Association, and an elected member of the International Statistical Institute. She has served on numerous advisory panels for the National Science Foundation and the U.S. Environmental Protection Agency.